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Association of sleep and body mass index in 3-6 years old children

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Abstract:

Background: Sleep problems and their association with obesity are of important issues in health. But findings in this area are controversial. The aim of this study was to determine the association of sleep and body mass index in 3-6 years old children.

Methods: This cross sectional study was conducted in 575 preschool children (3-6 years old). Data were collected through questionnaire and by interview with mothers. Anthropometric indices were measured.

Results: 57.7% of the subjects slept at a certain time of night. 70.2% of the subjects were awakened at a certain time of the morning. Resistance to sleep (17.8%) and resistance to wake up (15.4%) were the most prevalent sleep problems. Mean sleep duration was 10.45 ± 1.26 hr. Increase in weight was accompanied by decrease in sleep duration but the association of sleep problems and body mass index was not statistically significant.

Conclusion: Mean sleep duration was less than recommended time for this age group. Although there was no association between sleep problems and body mass index, sleep duration in overweight and obese children was less than normal weight children. More studies are needed to evaluate factors related to sleep.

Keywords:

Sleep, Body Mass Index, Children

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